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**United States Patent** [19]**Mahr et al.**[11] **Patent Number:** **5,928,707**[45] **Date of Patent:** **Jul. 27, 1999**[54] **FOOD PRODUCTS HAVING INTACT GRANULAR SWOLLEN STARCH AND THEIR PREPARATION**[75] Inventors: **Birgitt Mahr; Hans Uwe Trueck**, both of Stuttgart, Germany[73] Assignee: **Nestec S.A.**, Vevey, Switzerland[21] Appl. No.: **08/877,288**[22] Filed: **Jun. 17, 1997**[30] **Foreign Application Priority Data**

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[51] **Int. Cl.**<sup>6</sup> ..... **A23L 1/05; A23D 7/00**[52] **U.S. Cl.** ..... **426/661; 426/511; 426/602; 127/71**[58] **Field of Search** ..... **426/661, 511, 426/549, 602; 127/71; 252/311, 351**[56] **References Cited****U.S. PATENT DOCUMENTS**

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A food product is prepared by mixing (i) a native starch having, by weight, an amylose content of from about 10% to 30%, (ii) a lipid emulsifier which complexes amylose and (iii) water to obtain a dispersion, heating the dispersion first at a temperature below a gelatinization temperature of the amylose for a time for complexing the amylose and emulsifier and then at a temperature to gelatinize the starch and obtain a heated dispersion of intact swollen starch granules and the heated dispersion is cooled to obtain a food product having intact swollen starch granules. The native starch is employed in an amount of between 5% and 30% by weight based upon water weight and the emulsifier is employed in an amount of between 5% and 15% by weight based upon amylose content weight. The food product has a complex viscosity at 0.4 Hz of between 200 Pa.s. and 700 Pa.s., and the product may include at least a salt component and other ingredients, these ingredients being mixed with the starch, emulsifier and water before heating or being added to the food product after heating, and these products have a complex viscosity at 0.4 Hz of between 10 Pa.s. and 700 Pa.s.

**37 Claims, No Drawings**